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# Exploring the Role of Information Literacy Instruction in Student Co-Creation of Community-Based Research Products

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## Abstract

Supported by institutional commitments to community engagement, undergraduate students at universities across North America are participating in community-based research projects. These experiential learning activities allow students to collaborate with community partners to address issues in their communities, often resulting in co-creating research products that seek to have a real-world impact. This article reports on ways that academic librarians can support students engaged in these activities, informed by interview data gathered from university administrators and faculty members from across Canada with expertise in conducting and overseeing students' participation in research connected to university–community partnerships. This growing area of scholarly activity in higher education provides instruction librarians with unique opportunities to teach students valuable information literacy skills tied to knowledge equity, representing a threshold concept that recognizes students' abilities to create new knowledge that strives to be accessible, inclusive, and done in an ethical manner that serves community interests.

*Keywords:* community-based research, service learning, knowledge equity, metaliteracy

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## Exploring the Role of Information Literacy Instruction in Student Co-Creation of Community-Based Research Products

Through mission statements and strategic plans, universities across North America have widely asserted their commitments to student learning in tandem with the betterment of the communities that surround their campuses. More than 350 institutions in the United States have demonstrated these commitments by earning a Carnegie Elective Classification for Community Engagement (American Council on Education, 2023); Canadian institutions have begun working towards a similar, Canada-specific designation (Simon Fraser University, n.d.). This classification recognizes active and reciprocal participation between post-secondary institutions and public and private sectors to support research and teaching in service to society. Undergraduate students are often at the center of these community engagement efforts by participating in service-learning opportunities that bridge performing community service with meeting academic requirements. This experiential learning can take several forms, from work placements to volunteering. One common approach is involving students in community-based research projects, where students, under the supervision of a faculty member, work alongside community partners to conduct research to benefit the community. These projects allow students to co-create research products, including reports, presentations, and exhibits that aim to meet community needs and influence positive social change.

Research exploring students' role in community-based research tends to focus on how it can enhance their civic participation and broaden their research interests. Scholars of teaching and learning have paid less attention to how these opportunities can advance students' ability to create and communicate information ethically and effectively in different modes intended for audiences within and outside of academia. To that end, very little attention has been given to academic librarians' role in training students engaged in community-based research projects to foster these abilities. The *Framework for Information Literacy for Higher Education* (Association of College and Research Libraries [ACRL], 2015) offers a pertinent vantage point to consider how librarians can expand their practice to support students working on such research projects. Informed by the concept of metaliteracy, much of the *Framework* focuses on students' abilities to participate fully and collaboratively in both consuming and creating new information. As students co-create research products with community partners, librarians can teach students information literacy skills that go beyond

the ability to find and evaluate information for essays that only their instructor will read, sometimes referred to as "disposable assignments" (Wiley, 2013), to thinking critically about how to disseminate co-created research in different formats to support real-world outcomes.

The following article reports on a recent exploratory research study that sought to understand how academic librarians can support community-based research involving faculty and students on their campuses. Over four months, the researcher interviewed nearly two-dozen university administrators and faculty members from across Canada with expertise in research emerging from community-university partnerships. The researcher asked each interviewee about their experiences engaging students in community-based research, how they had involved academic librarians in these projects, and how they thought librarians could do more to support student training. Research participants revealed having little to no connection with academic librarians as part of their work with students. However, they shared several ways that academic librarians could do more to enrich student learning and skill development. Based on these findings, this article offers strategies for academic librarians to teach students about co-creating and disseminating research products with community partners. These strategies include activities focused on enhancing students' ability to think critically about what "valuable" information is in different contexts, whose voices are included and excluded through developing this work, and how it should be ethically and effectively created and shared. Each of these strategies is grounded in students' comprehension of knowledge equity, a threshold concept that recognizes students' abilities to create new knowledge that strives to be accessible, inclusive, and done ethically to serve community interests and, where appropriate, the public good.

## Literature Review

### Community-Based Research in the Classroom

Student participation in community-based research is one of several forms of service learning that have emerged in higher education over the last few decades that aim to develop students' academic skills while preparing them for civic engagement (Bringle & Hatcher, 1996; Felten & Clayton, 2011; Furco, 1996). Community-based research is "research that is conducted *with* and *for*, not *on*, members of a community" (Strand et al., 2003, p. xx). When faculty members and community partners design these research collaborations to include students, typically through coursework or as research assistants, this work becomes a form of service learning where students develop foundational research

skills while also directly learning about how to conceive of research conducted with community partners in ways that are reciprocal, accountable, focused on meeting community needs, and under the community's control and direction (Peterson, 2009; Strand, 2000). The positive outcomes of involving students directly in community-based research projects have been well-documented in the literature on experiential learning. Several works rooted in the social sciences have demonstrated how these experiences enhance students' research skills, disciplinary interests, and commitments to civic participation in their communities (Bach & Weinzimmer, 2011; Downey, 2018; George et al., 2017; Mayer et al., 2019; Ryser et al., 2013; Strand, 2000). Common to each of these works is a call for others to adopt community-based research as an effective tool for training students about impactful social research methods, alongside calls for institutions to provide more support for work in this area to accommodate the time and effort it can take to create meaningful partnerships between community partners and students.

While existing literature promotes many benefits to engaging students in community-based research, it pays little attention to learning outcomes associated with the skills developed through co-creating community-based research products. These projects frequently result in a range of outputs, including applied products for immediate use, like policy briefs, reports, and toolkits, and works disseminated publicly to create awareness and build solidarity, like photo exhibits and videos (Calleson et al., 2005). This gap in the literature raises questions about what students can gain from participating in co-creating new knowledge, what knowledge practices and dispositions they need to develop to participate effectively in this work, and what role information literacy instruction provided by academic librarians can play.

#### Situating Students as Co-Creators of Knowledge

To better understand librarians' potential role in training students engaged in co-creating community-based research products, it is helpful to turn to literature exploring concepts of metaliteracy and open pedagogy. In 2011, Mackey and Jacobson argued for reframing information literacy as a metaliteracy supporting multiple literacy types—including visual, media, and digital literacy—required for information users to engage effectively with collaborative technologies like social media. This concept has guided much of the knowledge practices and dispositions detailed in the *Framework for Information Literacy for Higher Education* (ACRL, 2015). While previous definitions of information literacy focused on students' ability to find, evaluate, organize, and use information, increasing engagement

with content in more fluid online spaces has expanded ways for students to create, share, and interact with information. Metaliterate learners are thus self-aware and self-reflective knowledge consumers *and* knowledge creators able to participate effectively in various information-sharing situations and digital environments (Mackey, 2022). The literature on how librarians have applied this conceptualization to student involvement in community-based research is sparse. A few works connect information literacy instruction to service learning more broadly (Kennedy & Gruber, 2020; Nutefall, 2016; Reed & Turner, 2019; Riddle, 2003; Sweet, 2013); however, they do not concentrate on co-creating new works as part of the research process.

Emerging literature on ways librarians can engage in open pedagogical practices with professorial faculty members in the classroom to advance information literacy instruction is helpful to this discussion. Open pedagogy refers to practices that engage students in creating and adapting openly licensed, freely accessible course materials, allowing them to demonstrate what they have learned while contributing to the learning of other students (DeRosa & Robison, 2017; Wiley, 2013). Examples of open pedagogy in practice include assignments where students contribute to developing open textbooks and *Wikipedia* articles. Among their many potential benefits, these practices have been found to enhance students' understanding of copyright (Goodsett, 2022; Schultz & Azadbakht, 2023), recognition of whose voices are included and excluded from scholarly discourse and ways to break down these disparities (Swart, 2022), and consideration of how to make information accessible to others (Reed & Turner, 2019). In these examples, librarians contributed to training, demonstrating how information literacy instruction can build bridges between student learning and producing new knowledge intended for public use.

#### Achieving Knowledge Equity with and for Community

While not common to discussions of information literacy, knowledge equity (like metaliteracy and open pedagogy) is a key concept that can inform librarians' approach to teaching students about co-creating community-based research products. Given the unique considerations that guide students' research collaborations with community partners, it represents a threshold concept, meaning a concept that students must grasp to master their understanding of something and progress in their learning (Cousin, 2006). Teaching students information literacy skills through a knowledge equity lens encourages students to think critically about who is included and excluded from the production, distribution, and access to information and why that is so (Kruschick & Schoch, 2023). Works exploring open

science practices that seek to make scientific research more openly available to the public have grappled with this, recognizing that even when scientific research is shared online, it often excludes many perspectives, insights, and epistemological approaches, especially those of researchers in the Global South and those from underrepresented populations in the North (Chan et al., 2011, 2020; Hall & Tandon, 2017). Similarly, scholars have explored the problematic exclusion of diverse knowledge and perspectives in *Wikipedia* (Bjork-James, 2021; Duncan, 2020; Kristiani, 2021) and in conventional academic texts more generally alongside calls for more inclusive citation practices (Chakravartty et al., 2018; Coalter, 2023). As Ketchum (2022) contended, "citation practices are political and can uphold oppressive hierarchies of what kind of knowledge are considered legitimate" (p. 20). Given the range of research products resulting from community-based research to meet different needs, students are often required to find and integrate a diversity of academic and non-academic sources (Stark, 2016). This provides them opportunities to think critically about how they define the authority of sources they use and how these sources represent and might impact people and situations on the ground among the communities involved.

Knowledge equity also requires students to weigh the advantages and drawbacks of providing open access to information. Like open education resources created by students that result from open pedagogical practices, community-based research projects often lead to co-creating public scholarship (Bradley, 2021; Chen et al., 2010). This form of scholarship encompasses research products that are accessible, public-facing, and intended to directly impact practice and policy to better the lives of others, particularly marginalized populations (Ketchum, 2022; Kezar et al., 2018). With community-based research, however, it is not always in the community's best interest to share these works openly online and the research process may do more harm than good, as discussed in works deliberating the collection and sharing of Indigenous data and knowledge (Koster et al., 2012; Tuck & Yang, 2014).

Considerations of knowledge equity tied to creating and disseminating community-based research products present students with valuable opportunities to develop critical information literacy skills that encourage them to consider the social, political, and economic systems that control and influence how information is created, shared and used (Samek, 2013). They are also in alignment with contemporary information literacy praxis as previously discussed (ACRL, 2015), particularly knowledge practices and dispositions relevant to thinking about authority as constructed and contextual within different communities, approaching information creation as a process that can result in a variety of

formats to meet different information needs, and understanding that information has value carrying with it power and privilege that can oppress some while benefiting others. Qualitative research exploring how these approaches can be integrated and applied to existing community-based research projects involving undergraduate students represents a noticeable gap in the literature. Learning directly from professorial faculty members and university administrators supporting these projects can reveal ways that librarians can engage more fully in these areas to support student training as students develop skills in carrying out community-based research.

## Methods

Participants for this research were selected through purposive sampling to find qualified individuals who could help respond to the overarching, exploratory research question guiding this study: How can academic librarians support community-based research? The researcher compiled a list of 46 English-language, publicly funded universities from across Canada. Working from this list, the researcher searched university websites and relevant conference programs to identify professorial faculty members and university administrators specializing in research involving university-community partnerships.

Between November 2022 and February 2023, 43 faculty members from across disciplines and 20 administrators working in offices and centers supporting community-based research (or closely related areas of community engaged research and community-engaged scholarship) were invited to participate in hour-long interviews by phone or Zoom. Seventeen faculty members and six administrators agreed to interviews that explored their experiences with community-based research, ways they felt their universities could provide more support for this research, and perspectives on the role that academic librarians could play in student training. Interviews included closed- and open-ended questions that allowed the researcher to probe for more in-depth information when interviewees raised relevant topics (see Appendix A: Interview Schedule – Researchers and Appendix B: Interview Schedule – Administrators). Interviewed faculty members were mostly women of European ancestry with specializations in social sciences and community health. At the time of being interviewed, 47% ( $n = 8$ ) were at the rank of Assistant Professor, 29% ( $n = 5$ ) were at the rank of Associate Professor, and 24% ( $n = 4$ ) had achieved the rank of Full Professor. An equal number of faculty members reported working at institutions classified as focusing on undergraduate programs ( $n = 6$ ) and a mix of undergraduate and master's programs ( $n = 6$ ), while slightly fewer worked at more research-intensive institutions focused on PhD



programs ( $n = 5$ ). Administrators reflected similar demographics. Given the small population size, additional details about these individuals are being withheld in the final reporting of this study.

Data collection concluded when interviews reached a point of saturation, with common themes and issues raised by many of the research participants. Following data collection, the researcher transcribed interview recordings, removed any identifying information, and sent transcripts to the research participants to review and revise. The researcher then uploaded these transcripts to NVivo qualitative analysis software and applied descriptive and in vivo codes to the data that were then grouped into broader categories to identify key themes and insights informing the research question. Through this inductive approach to data analysis, students' involvement in community-based research came up frequently, revealing ways that librarians could do more to support their learning and development during community-based research projects. The following section summarizes these findings. Individuals quoted have been assigned pseudonyms to maintain confidentiality in alignment with approved research ethics requirements.

## Results

### Student Involvement in Community-Based Research

Interviews with administrators indicated that, in their experience, universities across Canada are keen to expand experiential learning experiences for students, at least partly driven by governments viewing these opportunities as a conduit to employment.

Administrators sensed that service-learning programs and projects attract students because they provide a way to do work that gives back to the community while developing academic and real-world skills. At the same time, community partners seem to value these partnerships since they provide them with research data and products that help with program assessment, advocacy, and making a case for funding.

Most of the faculty members interviewed for this study had experience involving students in community-based research in recent years in some manner. While their graduate students frequently engaged in existing projects as research assistants or working towards completing a thesis or dissertation, several faculty members had brought components of community-based research into the undergraduate-level classes they taught. These were usually smaller classes involving students in the later stages of their degrees, including capstone courses. Most often, this would involve having community partners bring research questions to

students, who would then work towards co-creating research products to help meet community needs. These products included literature reviews, reports, infographics, podcasts, program evaluations, presentation slides, policy briefs, brochures, public service announcements, and social media content.

While discussing community-based research projects involving undergraduate students, faculty highlighted pre-existing skills that students brought to these projects, including knowing how to make content accessible to people with disabilities and applying effective strategies to make research products visually engaging. Instructors focused on teaching students professional communication skills and intercultural competencies when working with community partners and groups, and methodologies frequently utilized in community-based work, including qualitative and visual methods. Developing students' knowledge mobilization skills was also frequently a focus, particularly the ability to write and communicate information to different audiences within and outside of academia, with several faculty and administrators noting the transferability of these skills when students enter the workforce.

#### The Role of Librarians in Student Training

University administrators primarily worked in centers and offices that helped faculty members and students broker relationships with community partners, with some facilitating training on conducting community-based research. Administrators' interactions with academic librarians at their institutions were limited. Meanwhile, faculty members also shared that they had little to do with librarians at their institutions. In a few cases, faculty brought librarians into their classes to teach students how to do literature reviews and manage citations for research essays. Overwhelmingly, they did not involve librarians in community-based work. When asked why this was the case, most shared that they had very little understanding of what librarians do and how they could help with this type of research, while others expressed concern that the librarians on their campuses were already too busy performing other duties. Alongside speculating that both professorial faculty and librarians need to put more work into connecting and exploring opportunities for collaboration, faculty members shared a range of ways they think librarians might be able to support their classes in the future.

A common theme brought up by faculty members regarded the belief that librarians could help teach their students how to conduct literature reviews for community-based projects, as this can be very different than a typical literature review for an academic essay. One

faculty member, Rachel, described these differences while reflecting on reports that her students had recently created:

Because responding to community research asks in real-time often involves kind of newish problems, or really current events, there is a need to incorporate grey literature into the reports. And students are often very confused about that. It's tricky to talk about more rigorous and less rigorous forms of grey literature and where you might find grey literature. So, talking about... grey literature and not-for-profit reports, think tank reports, things like that. Having some support in terms of helping students negotiate that I think would be great.

One administrator, Jane, also articulated how important it is for students to recognize that when they embark on a community-based research project, there is often previous research that has already been done on that topic. This research may be available online; however, it may not have resulted in an academic publication that has found its way to a library or other publicly searchable database. As she explained:

The university often thinks there's a huge gap in the community and people don't know something. And I think students early on, and new researchers, are often surprised at how much information is already out there, and so really trying to educate students and early researchers about that... as information specialists letting them know there's already a ton of that being done.

Each of these examples demonstrates instances where students need to know how to use various search techniques and find and evaluate different types of information beyond academic literature when conducting community-based research. Similarly, a faculty member named Naomi shared how difficult it can be to cite some of these works while also expressing how important this is, in line with teaching students about inclusive citation practices:

The community-engaged work is especially hard to cite. And I think that even faculty members have problems trying to figure out how to do it. And I think it's important to actually do that work properly because you are citing the community's work, you're basically acknowledging them. So, especially in Indigenous research, there's a lot of stealing of ideas and knowledge going around and not enough citing. So yeah, I think that's something that the libraries can help with.

Along with citation practices, a few faculty said they could use librarians' help teaching students about copyright. Their experiences included students creating works that incorporated photographs and audio samples they had found online without verifying that they had permission to reuse these materials while also not giving attribution to the original copyright holders. These faculty worried that this unattributed, and sometimes unauthorized, sharing of others' works could prove problematic since community partners frequently share these works publicly online; students developing copyright and permissions experience could help alleviate potential future issues with the public sharing of others' intellectual property.

Finally, knowledge mobilization was raised several times as an area where librarians could provide more training to students. As one faculty member, Maria, noted:

I think sometimes students have really great questions, but they don't have as good a sense of how to share the information afterwards. So that's a great way that the library could be supporting the way that the information gets out to relevant stakeholders.

Another faculty member, Hannah, expressed similar sentiments: "I try and stay pretty connected to the knowledge mobilization space and look for novel, unique, meaningful ways for that to happen. But librarians certainly are a lot closer to that world." Throughout interviews, university administrators and faculty members recognized the role librarians could play in teaching students about different ways to share information and how to make it accessible to different audiences in terms of format, language, and usability.

## Discussion

Findings from this study echoed several challenges with community-based research found in the literature (Downey, 2018; Mayer et al., 2019; Ryser et al., 2013; Savan & Sider, 2003, among others). As these previous publications demonstrate, community-based research is built on reciprocal relationships that take time to build and sustain. When faculty bring students into these projects, they require significant supervision, and their contributions need to be planned around their time and availability in a course or program. Meanwhile, the faculty members who engage students in this work are often bound by workload constraints and receive limited recognition for their efforts in service-learning activities. While this study reveals that these opportunities are available to undergraduate students across Canada and beyond, such opportunities are also not common to every discipline.

These various challenges may help explain librarians' limited engagement with this work. It is important to note here as well that involving academic librarians in these projects can potentially require a lot of time on their end depending on ways that they are brought in to collaborate on a project, which could require several instruction sessions, one-on-one consultations, developing instructional materials, and so on. Recent work on the labor of librarians to support open pedagogy projects (McNally Carter & Santiago, 2023) serves as a warning for librarians interested in this area to consider their workload capacity, available resources, and their own training needs before committing to collaborate with others on their campuses doing this work.

Recognizing the challenges that community-based research can pose, there are many good reasons librarians should support student learning in this area. As previously discussed, these projects provide students with transferable, critical information literacy skills that can benefit them in their future careers and lives while providing opportunities to co-create research products that benefit those in the broader community. Taking these considerations into account, the following suggestions detail ways librarians can support student learning in this area, informed by findings from this study. This includes outreach strategies and techniques librarians can use to teach students information literacy skills relevant to community-based research once they have established connections with professorial faculty and administrators.

**Outreach:** All 23 individuals interviewed for this study expressed an interest in exploring ways that they might be able to collaborate more with librarians. Nearly everyone advised that librarians interested in expanding their practice to support community-based research visit a department meeting and reach out to faculty members directly. Connecting with areas supporting community-university partnerships on their campus is another way librarians can potentially provide support and training to students. Research participants warned against relying on one-size-fits-all workshops and newsletters, admitting they rarely took the time to engage with these less direct engagement efforts.

**Included and excluded voices:** Findings from this study suggest that there is more that librarians can do to teach students about grey literature and inclusive citation practices. Each is relevant to helping students create strong literature reviews for community-based research projects that often deal with current topics and strive to address social justice issues. In-class evaluation exercises can include a range of information types and formats, including things like government reports, first-hand accounts on social media, and

interviews with Indigenous elders, any of which may be useful depending on the information needs of a project. Worksheets like the one adapted by Hall (2023) that lay out different types of information and ask students to evaluate the reliability and relevance of each source depending on what they are looking for can help guide these activities.

Librarians can also encourage students to reflect on the background and positionality of different authors as they consider the works of underrepresented groups that may be missing from their own work. Libraries have compiled online guides to help students give credit to diverse voices, including Rowan University's *Inclusive Citation* guide (Baer, 2023) and the *MRU Guide to Visual and Verbal Citation* (Mount Royal University, 2022).

**Access to information:** Librarians can teach students to think critically about access to information in several ways. When students co-create research products with community partners, they may need to rely on academic literature, at least in part. In-class discussion can include if it is acceptable to share PDFs of paywalled academic articles available through library subscriptions with external partners while co-developing a literature review. This presents an opportunity for students to learn about the economics behind academic publishing that creates unequal access to knowledge for many, as well as open access alternatives and possible on-campus visitor access to library resources. They may also need to use existing audio and visual materials, providing a chance to teach about Creative Commons licenses and works in the public domain. Community-based research projects are also an opportunity to teach students how to communicate information to reach different audiences, helping them develop visual literacy skills and ways to make research products accessible to people with disabilities. For instance, librarians can have students brainstorm what makes a work accessible to others or evaluate existing community-based research products to help determine effective ways to accomplish this.

**As open as possible, as closed as necessary:** Another important discussion topic revolves around who owns the works co-created with and for community partners. While faculty members and community partners sometimes determine this beforehand, students can still be encouraged to think through how these works are shared, when, and with whom, along with the benefits and drawbacks of making things publicly available. For instance, when these works are shared online, students can link to them as evidence of their accomplishments in job and graduate applications, and others can use the work to their own ends. At the same time, however, the rights and needs of the community need to be respected and prioritized. To this end, librarians can teach students about copyright, research archiving, and Indigenous data governance principles (First Nations Information

Governance Centre, 2023; Global Indigenous Data Alliance, 2023) as they apply to a given project.

**Real-world outcomes:** An additional discussion topic for students is asking them how they will assess and communicate the success of their work. Doing so can open further discussions about different dissemination strategies and ways to track qualitative and quantitative metrics to help students communicate the impact of their work in future applications for funding, jobs, and academic programs.

### Conclusion

Knowledge equity is pertinent to community-based research, especially the majority done with and for marginalized populations. It is curious that this concept is not more present in the literature on information literacy or in academic works discussing the creation and sharing of information more generally. It does, however, feature prominently in the work of bodies like the Wikimedia Foundation (n.d.), the Knowledge Equity Lab (n.d.) at the University of Toronto, and the Knowledge Equity Network (2023) recently founded at the University of Leeds. As calls to make knowledge more accessible and inclusive grow louder, it is incumbent upon academic librarians to consider their approach to information literacy as it corresponds to teaching students to think about their roles and responsibilities when creating and disseminating knowledge, especially when it is co-created with and for the community.

The study reported in this article is only one portion of a broader multimethod research project exploring the role of academic librarians in community-based research. In addition to interviews with faculty and administrators, it included a survey of scholarly communications librarians across Canada. Notably, the response rate for this survey was low, at 23% ( $N = 16$ ), and no respondents provided insight into ways that librarians could provide more support to students engaged in this work despite a question asking them to consider faculty, community partners, *and* students. This corroborates findings from the literature and the interview data discussed in this article, suggesting that librarians are not often connected to community-based research involving students on their campuses. It also indicates the need for additional research to understand current practices and future possibilities. This could include research exploring the perspectives of subject librarians working in areas often engaged in community-based research, including the social sciences and community health, to learn how they view their current capacity and expertise to

advance student training in this area. Those specializing in the scholarship of teaching and learning might also consider studies assessing learning outcomes when librarians and professorial faculty members collaborate in teaching students about community-based research through a knowledge equity lens that covers inclusive citation, issues with access to information, knowledge mobilization, and research assessment. Doing so can continue to inform ways that librarians can enrich student learning in useful and impactful ways.

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## Appendix A: Interview Schedule – Researchers

### Dissemination/Knowledge Mobilization Strategies

1. Do you consider your research with community members *community-based research*, or is there another term that better describes your approach? How do you personally define this term?
2. Focusing on the last 5-6 years, how have you shared research results with community? What formats has it taken?
  - a. Did you involve community partners in deciding upon dissemination venues? If so, how?
  - b. Did the intended audience engage with this work in meaningful ways? How do you assess that kind of impact?
3. The following questions apply to non-traditional research outputs shared online, if applicable.
  - a. *Copyright*: What sorts of copyright statements, if any, were placed on the works that you disseminated online? How was this decided?
  - b. *Digital preservation*: Were any steps taken to ensure this work will remain online for future use by others?
    - i. In your opinion, does long-term digital preservation of this work matter?
  - c. *Metrics*: Have you collected usage data for this work (i.e., view and download counts)?
    - i. Do you consider this type of data useful? Why or why not?
4. What advice would you give an early career researcher doing community-based/engaged research who wants to communicate the positive impacts of non-traditional research outputs when applying for tenure or promotion?

### University/Library Services Experience and Perspectives

5. To your knowledge, what services and supports are available on your campus to support faculty conducting research with community?

6. What experience do you have engaging with academic library services for help with community-based/engaged research?

*Probe:* Have you approached a librarian for assistance with copyright, knowledge mobilization strategies, repositories, digital preservation, data sharing?

7. Are there ways that your institution, including the library and librarians, could do more to support faculty engaged in community-based/engaged research?
8. Are there ways that your institution, including the library and librarians, could do more to support community partners engaged in community-based/engaged research?
9. Do you have any advice on strategies that could be used to promote relevant library services and supports?

#### Student Engagement

10. If applicable, tell me how you have involved students in research with community.
  - a. How, if at all, have these initiatives involved the library or librarians?
11. Are there ways that your institution, including the library and librarians, could do more to support students engaged in community-based/engaged research?

#### Professional & Demographic Information

- Professional rank & title:
- Academic discipline: Community Health / Social Sciences / Environmental Studies / Social Work / Urban Planning / Cultural Studies / Other / N/A
- Years in current position:
- Age (approx.):
- To which gender identity do you most identify?
- How would you best describe your ethnic background?

## Appendix B: Interview Schedule – Administrators

### Institutional Support for Community-Based Research

1. How do you define community-based research in your own words?  
*Alternate question depending on administrative focus: How do you differentiate between community-based research and community-engaged research or scholarship?*
2. Do you perceive that community-based/engaged research is a priority at the institution where you work?
3. Briefly, tell me about your role and the services your centre/office offers faculty and students conducting research with community.
4. To the best of your knowledge, what services are available to community-based/engaged researchers through your university's library?
  - a. Has your area ever collaborated with the library?
  - b. Are there ways you could collaborate with the library but haven't?  
*Probe: Have you worked with them to archive or share resources? Is that a priority?*
5. In your opinion, are the services and supports at your institution meeting the needs of researchers and students working in this area?
  - a. How could services be improved?
6. Are there ways that the library and librarians at your institution could do more to support faculty and students engaged in community-based/engaged research?
  - a. Are there ways that the library could do more to support community partners?
  - b. Do you have any advice on strategies that could be used to promote library services that support community-based/engaged research at your institution?

### Dissemination/Knowledge Mobilization Strategies

7. What general tips and advice would you give a faculty member strategizing how they will disseminate findings from a research project with a community partner?



8. What advice would you give an early career researcher doing community-based/engaged research who wants to communicate the impacts of non-traditional research outputs when applying for tenure or promotion?
9. Does your centre/office track any metrics to help articulate the impact (or ongoing successes) of projects you support?
10. Do you think ensuring the long-term digital preservation of non-traditional research outputs resulting from community-based/engaged research co-authored/created by faculty, community, and students is important? Why or why not?

Professional & Demographic Information

- Professional title:
- Years in current position:
- Age (approx.):
- To which gender identity do you most identify?
- How would you best describe your ethnic background?